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TRANSHEIGHT CONSULTANTS PVT LTD
#1192,'A'Block,3rdCross, 5th Main,
Sahakarnagar,Bangalore-560092
098869 13195,080236 29195

Name of work: Improvements to Roads and drains at bhadrappa layout and balaji layout and surrounding area in ward number - 08

Test Report of Cement Concrete Cubes

IS: 516-1959 (Method of tests for strength of Concrete C1.5)	Date: 15/11/2019

Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	08-11-2019
Sample Type	Building Slab Concrete
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 7 Days Compressive Strength
Date of Test	15-11-2019

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Testing	Dimension of Specification	Cross sectional area	Weight of the sample	Failure Load	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	kg	KN	N/mm^2	N/mm^2
1	Building Slab Concrete	M20	08-11-2019	15-11-2019	150x150x150	22500	8.95	385.2	17.1	17.20
2	Building Slab Concrete	M20	08-11-2019	15-11-2019	150x150x150	22500	8.46	386.5	17.2	
3	Building Slab Concrete	M20	08-11-2019	15-11-2019	150x150x150	22500	8.705	389.5	17.3	

Result:

Transheight Consultants Pvt. Ltd. Bangalore

PMC Client Contractor

Assistant Executive Engineer.
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.
Bangalore.

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Name of work: Improvements to Roads and drains at bhadrappa layout and balaji layout and surrounding area in ward number - 08 .

Test Report of Cement Concrete Cubes

IS: 516-1959 (Method of tests for strength of Concrete C1.5)	Date: 06-12-2019

Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	08-11-2019
Sample Type	Building Slab Concrete
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 28 Days Compressive Strength
Date of Test	06-12-19

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Testing	Dimension of Specification	Cross sectional area	Weight of the sample	Failure Load	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	kg	KN	N/mm^2	N/mm^2
1	Building Slab Concrete	M20	08-11-2019	06-12-19	150x150x150	22500	8.505	495.5	22.0	22.13
2	Building Slab Concrete	M20	08-11-2019	06-12-19	150x150x150	22500	8.465	506.2	22.5	
3	Building Slab Concrete	M20	08-11-2019	06-12-19	150x150x150	22500	8.958	492.2	21.9	

Result:

Transheight Consultants Pvt. Ltd. Bangalore PMC

Client

Contractor

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

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Name of work: Improvements to Roads and drains at bhadrappa layout and balaji layout and surrounding area in ward number - 08

Test Report of Cement Concrete Cubes

IS: 516-1959 (Method of tests for strength of Concrete C1.5) | Date: 15/11/2019

Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	08-11-2019
Sample Type	Building Slab Concrete
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 7 Days Compressive Strength
Date of Test	15-11-19

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Testing	Dimension of Specification	Cross sectional area	Weight of the sample	Failure Load	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	kg	KN	N/mm²	N/mm²
1	Building Slab Concrete	M20	08-11-2019	15-11-19	150x150x150	22500	8.91	380.2	16.9	17.40
2	Building Slab Concrete	M20	08-11-2019	15-11-19	150x150x150	22500	8.54	399.6	17.8	
3	Building Slab Concrete	M20	08-11-2019	15-11-19	150x150x150	22500	8.809	395	17.6	

Result:

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Client Contractor

Assistant Executive Engineer,
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Name of work: Improvements to Roads and drains at bhadrappa layout and balaji layout and surrounding area in ward number - 08 .

Test Report of Cement Concrete Cubes

IS: 516-1959 (Method of tests for strength of Concrete C1.5)	Date: 06-12-2019
Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	08-11-2019
Sample Type	Building Slab Concrete
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 28 Days Compressive Strength
Date of Test	06-12-19

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Testing	Dimension of Specification	Cross sectional area	Weight of the sample	Failure Load	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	kg	KN	N/mm²	N/mm²
1	Building Slab Concrete	M20	08-11-2019	06-12-19	150x150x150	22500	8.459	490.5	21.8	21.98
2	Building Slab Concrete	M20	08-11-2019	06-12-19	150x150x150	22500	8.461	505.6	22.5	
3	Building Slab Concrete	M20	08-11-2019	06-12-19	150x150x150	22500	8.984	487.4	21.7	

Result:

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PMC Client Contractor

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Physical Requirements for Coarse Aggregate for Bituminous Concrete

IS: 2386 Part-I, III & IV — Date: 18-01-2020

Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	17-01-2020
Sample Type	Bituminous Concrete (BC)
Date of Test	18-01-2020

Table 500-16 : Physical Requirements of Coarse Aggregate for Bituminous Concrete (BC)

Peperty	Test	Result	Specification	Method of Test
Partial Shape	Flakiness Index	15.95	Combination Flakiness & Elongation Index for BC is Maximum 35%	IS: 2386 Part-I
	Elongation Index	14.20		
Strength	Aggregate Impact Value	23.54	Maximum 24%	IS: 2386 Part-IV
Specific Gravity	Specific Gravity	2.48	Maximum 2.7	IS: 2386 Part-III
Water Absorption	Water Absorption	1.30%	Maximum 2%	IS: 2386 Part-III

Remarks :

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Reults of Gradation for Bituminous Concrete (BC)

IS 2386 (Part-1) 1963 (Reaffirmed-2007)	Date: 18-01-2020

Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	17-01-2020
Type of Mix	Bituminous Concrete (BC)
Date of Test	18-01-2020

Total wt of the sample (gms):			5000			
IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifeations as per MORTH (Table 500-17) (Grading-II)	Remarks
19	0	0	0.0	100	100	Satisfactory
13.2	175	175	3.5	96.5	90-100	Satisfactory
9.5	675	850	17.0	83.0	70-88	Satisfactory
4.75	1135	1985	39.7	60.3	53-71	Satisfactory
2.36	475	2460	49.2	50.8	42-56	Satisfactory
1.18	328	2788	55.8	44.2	34-48	Satisfactory
0.6	315	3103	62.1	37.9	26-38	Satisfactory
0.3	502	3605	72.1	27.9	18-28	Satisfactory
0.15	442	4047	80.9	19.1	12-20	Satisfactory
0.075	485	4532	90.6	9.4	4-10	Satisfactory
PAN	468	5000	100.0	0.0	0	Satisfactory

Remarks: Satisfactory

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Report on Bitumen

IS: 1201-1220 (1978) (Reaffirmed-2004) | Date: 18-01-2020

Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Date of Reciept	17-01-2020
Sample Type	Bitumen (VG-30)
Date of Test	18-01-2020

Test Results

Sl. No	Name of Test	Result	Requirements as per IS: 73-2013
1	Penetration at 25°C, 1/10th mm	62	60 to 70
2	Softening Point, °C	51	Min. 47°C
3	Ductility, cm	55	Min. 40cm
4	Viscocity Test,Poise(Min)	2752	Range 2400-3600
5	Flash Point,°C	238	Min. 220°C

Remarks :

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PMC Client Contractor

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Result on Stability of Mix

IS: 1201 &1220 (1978) (Reaffirmed-2004) | Date: 18-01-2020

Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Date of Reciept	17-01-2020
Sample Type	Bitumen
Date of Test	18-01-2020

Test Results of the test conducted on the Bituminos Concrete (BC) mix sample are as follow

Sl. No	Name of Test	Test-1	Test-2	Specified limit as per MORTH specification table 500-11
1	Marshall Stability at 60°C	15.9	15.8	10 KN (Minimum)
2	Marshal flow at 60°C	3.3	3.2	2-4
3	Percentage air Voids	5.12	5.07	3-6
4	Percent Voids in mineral Aggregate (VMA %)	14.56	14.25	13-15
5	Percent Voids in mineral Bitumen (VFB %)	71.25	72.54	65-75
5	Density, g/cc	2.47	2.41	-

Remarks :

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Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Determination of Flakiness Index and Elongation Index of Coarse Aggregate

IS 2386 (Part-1) 1963 (Reaffirmed-2007)	Date: 18-01-2020
Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	17-01-2020
Type of Mix	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of Test	18-01-2020

Results

Sl. No	Index	Percentage of Flakiness and Elongation Index	Specified limits as per MORTH (specification table 400-12)
1	Flakines Index (%)	15.12	Combined Flakiness and Elongation Index for WMM is Maximum 35%
2	Elongation Index (%)	16.85	
3	Water Absorption (%)	0.84	Max 2%
4	Aggregate Impact Value (%)	14.58	Aggregate Impact Value for WMM is Maximum 35%
5	Dry Desnsity (MDD) gm/cc	2.52	-
6	Moisture in (OMC) %	5.62	

Remarks :

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.	
Test Reults of Gradation for Wet Mix Macadam (WMM)	
IS: 2386 Part I	Date: 18-01-2020
Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	17-01-2020
Type of Mix	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of Test	18-01-2020

Total wt of the sample (gms):			11000			
IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per MORTH (Table 400-13)	Remarks
53	0	0.0	0.00	100	100	Satisfactory
45	445	440.0	4.00	96.0	95-100	Satisfactory
22.4	3745	4180.0	38.00	62.0	60-80	Satisfactory
11.2	2132	6316.2	57.42	42.6	40-60	Satisfactory
4.75	1785	8096.0	73.60	26.4	25-40	Satisfactory
2.36	1139	9229.0	83.90	16.1	15-30	Satisfactory
0.6	831	10065.0	91.50	8.5	8-22	Satisfactory
0.075	865	10934.0	99.40	0.6	0-5	Satisfactory

Remarks: Satisfactory

Transheight Consultants Pvt. Ltd. Bangalore

PMC Client Contractor

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

FIELD DENSITY BY SAND REPLACEMENT METHOD

IS 2720 (Part-28)	Date: 01-02-2020

Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike, Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Type of Mix	Coarse Aggregate for WMM (Wet Mix Macadam)
Date of Test	01-02-2020

Description of materials:	Subgrade		
Lab.MDD (gm/cc) =	2.520	Lab.OMC(%) =	5.59
Bulk Density of sand:	1.385	Sand retained in cone (gm)=W1	848.00

FIELD DENSITY BY SAND REPLACEMENT METHOD

SL.no	Particulars	S-1	S-2
1	Wt of soil from hole (w2) gm:	5342.50	5344.50
2	Wt of sand + cylinder before pouring(gm) (w3)	15000.00	15000.00
3	Wt of sand+ cylinder after pouring (gm)(w4)	11345.36	11331.59
4	Wt of sand in hole (gm)(w5= w3-w4-w1)	2806.64	2820.41
5	Volume of sand in hole (V = W5/Ysand)	2026.45	2036.40
6	Bulk density (gm/cc) (Yb= W2/v)	2.64	2.62
7	Moisture meter reading (%)	6.05	6.25
8	Dry density (g/cc) Yd = Yb /(1 + w/100)	2.49	2.47
9	Degree of compaction achieved, (%) (Yd/mdd)*100)	**98.65**	**98.02**
10	Required degree of compaction, (%) ,As per MORT&H 5th specification.	**98.335**	

Remarks: Satisfactory

Transheight Consultants Pvt. Ltd. Bangalore PMC

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Reults of Bitumen Binder Content and Gradation for Bituminous Macadam (BM-II)

IS 2386 (Part-1) 1963 (Reaffirmed-2011)	Date: 01-02-2020
Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Type of Mix	Bituminous Macadam (BM-II)
Date of Test	01-02-20

Calculation

	Chainage:		
	Trial 1	Trial 2	Trial 3
Wt of empty Bowl (g)	1031	1032	1031
Wt of empty Bowl + Mix before extraction (g)	1531	1532	1531
Wt of empty Bowl + Mix after extraction (g)	1514.2	1514.9	1514.3
Wt of filter paper before extraction (g)	3.5	3.5	3.5
Wt of filter paper after extraction (g)	5.3	5.32	5.35
Wt of fines (g)	1.8	1.82	1.85
Wt of aggrigate (g)	485	484.74	485.1
Wt of bitumin (g)	16.8	17.08	16.75
% binder contents in mix	3.46	3.52	3.45
Avg binder contents in mix (%)	3.48		

Remarks :

Transheight Consultants Pvt. Ltd. Bangalore PMC

Client Contractor

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Test Reults of Bitumen Binder Content and Gradation for Bituminous Macadam (BM-II)

Date: 01-02-2020

After Extraction (Trial-1)

Total wt of the sample (gms): 485

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per MORTH (Table 500-17) (Grading-II)	Remarks
26.5	0	0	0.0	100	100	Satisfactory
19	9	9	1.9	98.1	90-100	Satisfactory
13.2	62	71	14.6	85.4	56-88	Satisfactory
4.75	285	356	73.4	26.6	16-36	Satisfactory
2.36	48	404	83.3	16.7	4-19	Satisfactory
0.3	65	469	96.7	3.3	2-10	Satisfactory
0.075	12	481	99.2	0.8	0-8	Satisfactory

Remarks: Satisfactory

After Extraction (Trial-2)

Total wt of the sample (gms): 484.74

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per MORTH (Table 500-23) (Grading-II)	Remarks
26.5	0	0	0.0	100	100	Satisfactory
19	9	9	1.9	98.1	90-100	Satisfactory
13.2	75	84	17.3	82.7	56-88	Satisfactory
4.75	301	385	79.4	20.6	16-36	Satisfactory
2.36	51	436	89.9	10.1	4-19	Satisfactory
0.3	35	471	97.1	2.9	2-10	Satisfactory
0.075	8	479	98.8	1.2	0-8	Satisfactory

Remarks: Satisfactory

After Extraction (Trial-3)

Total wt of the sample (gms): 485.1

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per MORTH (Table 500-23) (Grading-II)	Remarks
26.5	0	0	0.0	100	100	Satisfactory
19	12	12	2.5	97.5	90-100	Satisfactory
13.2	85	97	20.0	80.0	56-88	Satisfactory
4.75	305	402	82.9	17.1	16-36	Satisfactory
2.36	35	437	90.1	9.9	4-19	Satisfactory
0.3	31	468	96.5	3.5	2-10	Satisfactory
0.075	5	473	97.5	2.5	0-8	Satisfactory

Remarks: Satisfactory

Transheight Consultants Pvt. Ltd. Bangalore

PMC Client Contractor

Assistant Executive Engineer.
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P
Bangalore.

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098869 13195,080236 29195

Test Results of Bitumen Binder Content and Gradation for Bituminous Concrete (BC)

Date: 01-02-2020

After Extraction (Trial-1)

Total wt of the sample (gms): 475.88

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per MORTH (Table 500-17) (Grading-II)	Remarks
19	0	0	0.0	100	100	Satisfactory
13.2	12	12	2.5	97.5	90-100	Satisfactory
9.5	95	107	22.5	77.5	70-88	Satisfactory
4.75	115	222	46.7	53.3	53-71	Satisfactory
2.36	52	274	57.6	42.4	42-56	Satisfactory
1.18	35	309	64.9	35.1	34-48	Satisfactory
0.6	39	348	73.1	26.9	26-38	Satisfactory
0.3	34	382	80.3	19.7	18-28	Satisfactory
0.15	25	407	85.5	14.5	12-20	Satisfactory
0.075	43	450	94.6	5.4	4-10	Satisfactory

Remarks: Satisfactory

After Extraction (Trial-2)

Total wt of the sample (gms): 476.07

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per MORTH (Table 500-23) (Grading-II)	Remarks
19	0	0	0.0	100	100	Satisfactory
13.2	8	8	1.7	98.3	90-100	Satisfactory
9.5	93	101	21.2	78.8	70-88	Satisfactory
4.75	105	206	43.3	56.7	53-71	Satisfactory
2.36	52	258	54.2	45.8	42-56	Satisfactory
1.18	35	293	61.6	38.4	34-48	Satisfactory
0.6	42	335	70.4	29.6	26-38	Satisfactory
0.3	40	375	78.8	21.2	18-28	Satisfactory
0.15	25	400	84.1	15.9	12-20	Satisfactory
0.075	40	440	92.5	7.5	4-10	Satisfactory

Remarks: Satisfactory

After Extraction (Trial-3)

Total wt of the sample (gms): 476.15

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per MORTH (Table 500-23) (Grading-II)	Remarks
19	0	0	0.0	100	100	Satisfactory
13.2	9	9	1.9	98.1	90-100	Satisfactory
9.5	94	103	21.6	78.4	70-88	Satisfactory
4.75	110	213	44.8	55.2	53-71	Satisfactory
2.36	48	261	54.8	45.2	42-56	Satisfactory
1.18	41	302	63.5	36.5	34-48	Satisfactory
0.6	43	345	72.5	27.5	26-38	Satisfactory
0.3	35	380	79.9	20.1	18-28	Satisfactory
0.15	29	409	85.9	14.1	12-20	Satisfactory
0.075	35	444	93.3	6.7	4-10	Satisfactory

Remarks: Satisfactory

Transheight Consultants Pvt. Ltd. Bangalore

PMC Client Contractor

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.			
Test Reults of Bitumen Binder Content and Gradation for Bituminous Concrete (BC)			
IS 2386 (Part-1) 1963 (Reaffirmed-2011)			Date: 01-02-2020
Lab I'd	ISO/IEC17025:2005		
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.		
Consultant	Transheight Consultants Private Limited		
Contractor	B.B Umesh (S.M.L.P Asphats)		
Customer Reference	BBMP/EE/BTP/WO/110/2019-20		
Source of Sample	Sample supplied by Agency		
Type of Mix	Bituminous Concrete (BC)		
Date of Test	01-02-2020		
Calculation			
	Chainage:		
	Trial 1	Trial 2	Trial 3
Wt of empty Bowl (g)	1034	1033	1035
Wt of empty Bowl + Mix before extraction (g)	1534	1533	1535
Wt of empty Bowl + Mix after extraction (g)	1508.0	1507.2	1509.1
Wt of filter paper before extraction (g)	3.5	3.5	3.5
Wt of filter paper after extraction (g)	5.25	5.32	5.39
Wt of fines (g)	1.75	1.82	1.89
Wt of aggrigate (g)	475.77	476.02	475.99
Wt of bitumin (g)	25.98	25.8	25.9
% binder contents in mix	5.46	5.42	5.44
Avg binder contents in mix (%)	5.44		
Remarks :			
PMC	Client	Contractor	

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Test Results of Bitumen Binder Content and Gradation for Bituminous Concrete (BC)

Date: 01-02-2020

After Extraction (Trial-1)

Total wt of the sample (gms): 475.77

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per MORTH (Table 500-17) (Grading-II)	Remarks
19	0	0	0.0	100	100	Satisfactory
13.2	11	11	2.3	97.7	90-100	Satisfactory
9.5	74	85	17.9	82.1	70-88	Satisfactory
4.75	112	197	41.4	58.6	53-71	Satisfactory
2.36	75	272	57.2	42.8	42-56	Satisfactory
1.18	25	297	62.4	37.6	34-48	Satisfactory
0.6	21	318	66.8	33.2	26-38	Satisfactory
0.3	43	361	75.9	24.1	18-28	Satisfactory
0.15	45	406	85.3	14.7	12-20	Satisfactory
0.075	35	441	92.7	7.3	4-10	Satisfactory

Remarks: Satisfactory

After Extraction (Trial-2)

Total wt of the sample (gms): 476.02

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per MORTH (Table 500-23) (Grading-II)	Remarks
19	0	0	0.0	100	100	Satisfactory
13.2	13	13	2.7	97.3	90-100	Satisfactory
9.5	75	88	18.5	81.5	70-88	Satisfactory
4.75	102	190	39.9	60.1	53-71	Satisfactory
2.36	81	271	57.0	43.0	42-56	Satisfactory
1.18	30	301	63.3	36.7	34-48	Satisfactory
0.6	12	313	65.8	34.2	26-38	Satisfactory
0.3	30	343	72.1	27.9	18-28	Satisfactory
0.15	45	388	81.6	18.4	12-20	Satisfactory
0.075	40	428	90.0	10.0	4-10	Satisfactory

Remarks: Satisfactory

After Extraction (Trial-3)

Total wt of the sample (gms): 475.99

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per MORTH (Table 500-23) (Grading-II)	Remarks
19	0	0	0.0	100	100	Satisfactory
13.2	15	15	3.2	96.8	90-100	Satisfactory
9.5	73	88	18.5	81.5	70-88	Satisfactory
4.75	112	200	42.0	58.0	53-71	Satisfactory
2.36	70	270	56.8	43.2	42-56	Satisfactory
1.18	34	304	63.9	36.1	34-48	Satisfactory
0.6	25	329	69.2	30.8	26-38	Satisfactory
0.3	41	370	77.8	22.2	18-28	Satisfactory
0.15	44	414	87.0	13.0	12-20	Satisfactory
0.075	40	454	95.4	4.6	4-10	Satisfactory

Remarks: Satisfactory

Client Contractor

Assistant Executive Engineer
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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.			
Test Reults of Bitumen Binder Content and Gradation for Bituminous Concrete (BC)			
IS 2386 (Part-1) 1963 (Reaffirmed-2011)		Date: 01-02-2020	
Lab I'd	ISO/IEC17025:2005		
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.		
Consultant	Transheight Consultants Private Limited		
Contractor	B.B Umesh (S.M.L.P Asphats)		
Customer Reference	BBMP/EE/BTP/WO/110/2019-20		
Source of Sample	Sample supplied by Agency		
Type of Mix	Bituminous Concrete (BC)		
Date of Test	01-02-2020		
Calculation			
	Chainage:		
	Trial 1	Trial 2	Trial 3
Wt of empty Bowl (g)	1034	1034	1035
Wt of empty Bowl + Mix before extraction (g)	1534	1534	1535
Wt of empty Bowl + Mix after extraction (g)	1508	1507.9	1509.0
Wt of filter paper before extraction (g)	3.5	3.5	3.5
Wt of filter paper after extraction (g)	5.26	5.34	5.39
Wt of fines (g)	1.76	1.84	1.89
Wt of aggrigate (g)	475.76	475.69	475.84
Wt of bitumin (g)	26	26.15	26.05
% binder contents in mix	5.46	5.50	5.47
Avg binder contents in mix (%)	5.48		
Remarks :			
PMC	Client	Contractor	

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Test Results of Bitumen Binder Content and Gradation for Bituminous Concrete (BC)

Date: 01-02-2020

After Extraction (Trial-1)

Total wt of the sample (gms): 475.76

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per MORTH (Table 500-17) (Grading-II)	Remarks
19	0	0	0.0	100	100	Satisfactory
13.2	12	12	2.5	97.5	90-100	Satisfactory
9.5	95	107	22.5	77.5	70-88	Satisfactory
4.75	108	215	45.2	54.8	53-71	Satisfactory
2.36	49	264	55.5	44.5	42-56	Satisfactory
1.18	38	302	63.5	36.5	34-48	Satisfactory
0.6	42	344	72.3	27.7	26-38	Satisfactory
0.3	35	379	79.7	20.3	18-28	Satisfactory
0.15	33	412	86.6	13.4	12-20	Satisfactory
0.075	30	442	92.9	7.1	4-10	Satisfactory

Remarks: Satisfactory

After Extraction (Trial-2)

Total wt of the sample (gms): 475.69

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per MORTH (Table 500-23) (Grading-II)	Remarks
19	0	0	0.0	100	100	Satisfactory
13.2	15	15	3.2	96.8	90-100	Satisfactory
9.5	93	108	22.7	77.3	70-88	Satisfactory
4.75	108	216	45.4	54.6	53-71	Satisfactory
2.36	58	274	57.6	42.4	42-56	Satisfactory
1.18	36	310	65.2	34.8	34-48	Satisfactory
0.6	31	341	71.7	28.3	26-38	Satisfactory
0.3	35	376	79.0	21.0	18-28	Satisfactory
0.15	26	402	84.5	15.5	12-20	Satisfactory
0.075	38	440	92.5	7.5	4-10	Satisfactory

Remarks: Satisfactory

After Extraction (Trial-3)

Total wt of the sample (gms): 475.84

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per MORTH (Table 500-23) (Grading-II)	Remarks
19	0	0	0.0	100	100	Satisfactory
13.2	9	9	1.9	98.1	90-100	Satisfactory
9.5	94	103	21.6	78.4	70-88	Satisfactory
4.75	111	214	45.0	55.0	53-71	Satisfactory
2.36	45	259	54.4	45.6	42-56	Satisfactory
1.18	46	305	64.1	35.9	34-48	Satisfactory
0.6	41	346	72.7	27.3	26-38	Satisfactory
0.3	35	381	80.1	19.9	18-28	Satisfactory
0.15	26	407	85.5	14.5	12-20	Satisfactory
0.075	38	445	93.5	6.5	4-10	Satisfactory

Remarks: Satisfactory

Transheight Consultants Pvt. Ltd. Bangalore

PMC | Client | Contractor

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Report of Physical Properties of Cement-53 Grade

IS: 12269-2013, IS: 4031(Part-1,2,3,4,5,6,11)-1988	Date: 22-11-2019
Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	21-11-2019
Sample Type	Birla Super 53-Grade
Date of Test	22-11-2019
Environmental Condition during test	Temperature: 26°C
	Humidity: 72%

Test Results

Sl. No	Physical Properties	Result	Requirements as per IS: 12269-2013
1	Finess by dry sieving (%)	1.95	-
2	Finess by Air permiability method (m^2/kg, Min)	285.69	225 m2
3	Specific gravity /Density, (gm/cm)	3.65	-
4	Standard Consistency (%)	28.64%	Not Specified
5	Initial Setting time	151 Minutes	Not less than 30 minutes
6	Final Setting Time	245 Minutes	Not more than 15 minutes
7	Soudness (Le Chateliers Method)	1.9 mm	Not more than 10 mm

Remarks :

Transheight Consultants Pvt. Ltd. Bangalore

PMC Client Contractor

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Report of Physical Properties of Cement-53 Grade

IS: 12269-2013, IS: 4031(Part-4,6)-1988		Date: 22-11-2019
Lab I'd	ISO/IEC17025:2005	
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.	
Consultant	Transheight Consultants Private Limited	
Contractor	B.B Umesh (S.M.L.P Asphats)	
Customer Reference	BBMP/EE/BTP/WO/110/2019-20	
Source of Sample	Sample supplied by Agency	
Sample Condition	Satisfactory	
Date of Reciept	21-11-2019	
Sample Type	Birla Super 53-Grade	
Date of Test	22-11-2019	
Environmental Condition during test	Temperature: 26°C	
	Humidity: 72%	

Compressive Strength

Sl. No	Physical Properties	Result	Requirements as per IS: 12269-2013
1	3 Days	30.25 N/mm^2	Not less than 27 N/mm2
2	7 Days	41.25 N/mm^3	Not less than 37 N/mm3
3	28 Days	56.95 N/mm^4	Not less than 53 N/mm4

Remarks :

PMC Client Contractor

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Report of Fine Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3)-1963 (Reaffirmed-2012)	Date: 22-11-2019
Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	21-11-2019
Sample Type	Fine Aggregate
Date of Test	22-11-2019

Total wt of the sample (gms):	1000

IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per IS: 383-2016			
					Grading Zone-1	Grading Zone-2	Grading Zone-3	Grading Zone-4
10	0	0	0.0	100	100	100	100	100
4.75	29	29	2.9	97.1	90-100	90-100	90-100	95-100
2.36	70	99	9.9	90.1	60-95	75-100	85-100	95-100
1.18	247	346	34.6	65.4	30-70	55-90	75-100	90100
600	219	565	56.5	43.5	15-34	35-59	60-79	80-100
300	211	776	77.6	22.4	5-20	8-30	12-40	15-50
150	189	965	96.5	3.5	0-10	0-10	0-10	0-15
PAN	35	1000	100.0	0.0	-	-	-	-

Result: The Tested Sample Conforms to Grading Zone-II

EMC Client Contractor

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Report of Fine Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3)-1963 (Reaffirmed-2012)	Date: 22-11-2019
Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	21-11-2019
Sample Type	Fine Aggregate
Date of Test	22-11-2019

Physical Properties

Sl. No	Physical Properties	Result	Requirements as per IS: 386-2016
1	Water Absorption (%)	1.54	-
2	Specific Gravity	2.48	-
3	Material Finer than 75 micron (%)	7.12	Uncrushed fine Aggregate Max 3% Crushed Fine Aggregate Max 15% Mixed Fine Aggregate Max 12% Manufacture Fine Aggregate Max 10%

Remarks :

Transheight Consultants Pvt. Ltd. Bangalore PMC

Client Contractor

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Report of Coarse Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3 & 4)-1963 (Reaffirmed-2012)	Date: 22-11-2019
Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	21-11-2019
Sample Type	Coarse Aggregate
Date of Test	22-11-2019

Sieve Analysis (Particle Size Distribution) of 20mm Down Coarse Aggregate

Total wt of the sample (gms):			5000		
IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per IS: 383-2016
40	0	0	0.0	100	100
20	262	262	5.2	94.8	90-100
10	2428	2690	53.8	46.2	20-55
4.75	2125	4815	96.3	3.7	0-10
PAN	185	5000	100.0	0.0	-

Remarks :

Transheight Consultants Pvt. Ltd. Bangalore PMC

Client Contractor

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#1192,'A'Block,3rdCross, 5th Main,
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098869 13195,080236 29195

Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Report of Coarse Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3)-1963 (Reaffirmed-2012) | Date: 22-11-2019

Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	21-11-2019
Sample Type	Coarse Aggregate
Date of Test	22-11-2019

Physical Properties

Sl. No	Physical Properties	Result	Requirements as per IS: 386-2016
1	Flakines Index (%)	14.25	Combined Flakiness and Elongation Index ahall nor exceed 40% for uncrushed and crushed aggregate
2	Elongation Index (%)	13.58	
3	Specific Gravity	2.45	-
4	Bulk Density (Loose) (Kg/l)	1.7	-
5	Bulk Density (Composed) (Kg/l)	1.47	-
6	Water Absorption (%)	0.26	-
7	Aggregate Crushing Value (%)	22.18	Max 30% for Aggregates to be used in concrete for wearing surfaces, In case aggregate Crushing Value exceeds 30% then the test for 10% fines should be conducted for aggregate to be used in concrete oter tha for wearing surfaces
8	Aggregate Impact Value (%)	23.17	Max 30% for aggregate to be used in concrete for wearing surfaces, 45% for aggregate to be used in concrete other than for wearing surface.

Remarks :

Client | Contractor

Transheight Consultants Pvt. Ltd. Bangalore

Assistant Executive Engineer
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TRANSHEIGHT
PAVING FUTURE

TRANSHEIGHT CONSULTANTS PVT LTD
#1192,'A'Block,3rdCross, 5th Main,
Sahakarnagar,Bangalore-560092
098869 13195,080236 29195

Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Report of Coarse Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3 & 4)-1963 (Reaffirmed-2012)	Date: 22-11-2019
Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	21-11-2019
Sample Type	Coarse Aggregate
Date of Test	22-11-2019

Sieve Analysis (Particle Size Distribution) of 40mm Down Coarse Aggregate

Total wt of the sample (gms):			15000		
IS Sieve size (mm)	Weight retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specifcations as per IS: 383-2016
80	0	0	0	100	100
40	550	550	3.7	96.3	90-100
20	5702	6252	41.7	58.3	30-70
10	4362	10614	70.8	29.2	10-35
4.75	4230	14844	99.0	1.0	0-5
PAN	156	15000	100.0	0.0	-

Remarks :

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Client Contractor

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Test Report of Coarse Aggregate

IS: 383-2016, IS: 2386 (Part-1, 3)-1963 (Reaffirmed-2012) | **Date: 22-11-2019**

Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	21-11-2019
Sample Type	Coarse Aggregate
Date of Test	22-11-2019

Physical Properties

Sl. No	Physical Properties	Result	Requirements as per IS: 386-2016
1	Flakines Index (%)	13.40	Combined Flakiness and Elongation Index ahall nor exceed 40% for uncrushed and crushed aggregate
2	Elongation Index (%)	12.8	
3	Specific Gravity	2.54	-
4	Bulk Density (Loose) (Kg/l)	1.44	-
5	Bulk Density (Composed) (Kg/l)	1.51	-
6	Water Absorption (%)	0.92	-

Remarks :

PMC Client Contractor

Assistant Executive Engineer
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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Report of Steel

IS: 1786-2008, IS: 1608-2005 (Reaffirmed-2011), IS: 1599-2012 | **Date: 22-11-2019**

Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	21-11-2019
Sample Type	Meenakshi
Date of Test	22-11-2019

Sl No.	Identification of Sample	Grade of the Sample	Diameter of the Steel Bar	Weight of the Sample	Yield Stress	Tensile Strength	Elongation	Bend Test	Rebend Test
			mm	kg/m	N/mm^2	N/mm^2	%		
1	Meenakshi	Fe500	8.0	0.391	512	652	20	Satisfactory	Satisfactory
2	Meenakshi	Fe500	10.0	0.616	528	672	20	Satisfactory	Satisfactory
3	Meenakshi	Fe500	12.0	0.888	544	668	20	Satisfactory	Satisfactory

Result:

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Client **Contractor**

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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Report of Cement Concrete Cubes

IS: 516-1959 (Method of tests for strength of Concrete C1.5) | **Date: 19-12-2019**

Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	12-12-2019
Sample Type	School Building Footing
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 7 Days Compressive Strength
Date of Test	19-12-2019

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Testing	Dimension of Specification	Cross sectional area	Weight of the sample	Failure Load	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	kg	KN	N/mm²	N/mm²
1	School Building Footing	M20	12-12-2019	19-12-2019	150x150x150	22500	8.96	385.2	17.1	17.44
2	School Building Footing	M20	12-12-2019	19-12-2019	150x150x150	22500	8.65	397.2	17.7	
3	School Building Footing	M20	12-12-2019	19-12-2019	150x150x150	22500	8.85	395	17.6	

Result:

PMC Client Contractor

Assistant Executive Engineer,
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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Report of Cement Concrete Cubes

IS: 516-1959 (Method of tests for strength of Concrete C1.5)	Date:09-01-2020

Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	12-12-2019
Sample Type	School Building Footing
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 28 Days Compressive Strength
Date of Test	09-01-2020

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Testing	Dimension of Specification	Cross sectional area	Weight of the sample	Failure Load	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	kg	KN	N/mm^2	N/mm^2
1	School Building Footing	M20	12-12-2019	09-01-2020	150x150x150	22500	8.569	495	22.0	22.17
2	School Building Footing	M20	12-12-2019	09-01-2020	150x150x150	22500	8.456	505.6	22.5	
3	School Building Footing	M20	12-12-2019	09-01-2020	150x150x150	22500	8.896	496.2	22.1	

Result:

Transheight Consultants Pvt. Ltd. Bangalore

PMC Client Contractor

Assistant Executive Engineer,
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Yelahanka Zone, B.B.M.P.,
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TRANSHEIGHT CONSULTANTS PVT LTD
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Name of work: Improvements to roads and drains in Kodigehalli colony, Maruthinagara, BB Nagar and surrounding area in ward no. 08.

Test Report of Cement Concrete Cubes

IS: 516-1959 (Method of tests for strength of Concrete C1.5)	Date: 13/01/2020
Lab I'd	ISO/IEC17025:2005
Client	Bruhat Bengalore Mahanagara Palike (BBMP) , Byatarayanapura, Bengaluru.
Consultant	Transheight Consultants Private Limited
Contractor	B.B Umesh (S.M.L.P Asphats)
Customer Reference	BBMP/EE/BTP/WO/110/2019-20
Source of Sample	Sample supplied by Agency
Sample Condition	Satisfactory
Date of Reciept	06-01-2020
Sample Type	School building- Beam Concrete
Sample Type/Size	150x150x150 mm
Sample Grade/ Age	M20/ 7 Days Compressive Strength
Date of Test	13-01-2020

Sl No.	Identification Mark	Grade of Concrete	Date of Casting	Date of Testing	Dimension of Specification	Cross sectional area	Weight of the sample	Failure Load	Compressive Strength	Average Compressive Strength
					mm	Sq.mm	kg	KN	N/mm^2	N/mm^2
1	Beam Concrete	M20	06-01-2020	13-01-2020	150x150x150	22500	8.89	382.65	17.0	17.37
2	Beam Concrete	M20	06-01-2020	13-01-2020	150x150x150	22500	8.65	395.6	17.6	
3	Beam Concrete	M20	06-01-2020	13-01-2020	150x150x150	22500	8.52	394	17.5	

Result:

Transheight Consultants Pvt. Ltd. Bangalore PMC

Client Contractor

Assistant Executive Engineer
Kodigehalli Sub Division,
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